UNITED STATES PATENT AND TRADEMARK OFFICE

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10/531,569	04/18/2005	Tao Zhang	46843-216978 RK	1394

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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _18 April 2005_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-5_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-5_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _08/10/2006, 04/18/2005_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____

DETAILED ACTION

1.   **Claims 1-5 are presented for examination.**

The claims and only the claims form the metes and bounds of the invention. "Office personnel are to give claims their
broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55,
44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are
not read into the claim. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969)" (MPEP p 2100-
8, c 2, I 45-48; p 2100-9, c 1, l 1-4). The Examiner has full latitude to interpret each claim in the broadest reasonable
sense. The Examiner will reference prior art using terminology familiar to one of ordinary skill in the art. Such an
approach is broad in concept and can be either explicit or implicit in meaning.

Information Disclosure Statement

2.   The information disclosure statements (IDS) submitted on 04/18/2005 and 08/10/2006

are in compliance with the provisions of 37 CFR 1.97. The document CN 1170995A and

JP 2002247111 are not considered because they lack an English translation. Otherwise, the

information disclosure statements are being considered by the examiner.

Preliminary Amendment

3.   The preliminary amendment submitted on 04/18/2005 is duly noted.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range
of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the
abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent

> claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist
> readers in deciding whether there is a need for consulting the full patent text for details.
>
> The language should be clear and concise and should not repeat information given in the title. It should avoid using
> phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The
> disclosure describes," etc.

4.   The abstract of the disclosure is objected to because the terms *"comprising"* and *"said*

method" are used and legal phraseology should be avoided. Correction is required. See MPEP

§ 608.01(b).

   The disclosure is objected to because of the following informalities: on page 5, line 29,

page 6, lines 1, 10, and 11, page 7, lines 3, 5, 9, 10, page 8, lines 17 and 27, and page 9, lines 19

and 22 there are numbers in parenthesis which appear to refer to drawings which were never

submitted. Appropriate correction is required.

                                          Claim Objections

5.   Claims 1 and 5 are objected to because of the following informalities: claim 1, line 9

states *"responding to MGC"* should read *"responding to the MGC"*, claim 5, line 8 the examiner

assumed that *"said parameter"* is the same as *"the security authentication parameter"* claim 5,

line 6 if it is not then clarification is needed, if it is please correct. Appropriate correction is

required.

                                    Claim Rejections - 35 USC § 112

   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

6.   **Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for**

failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

        Claim 1 recites the limitation *"the security authentication"* in line 6 and *"the*

authentication result" in line 12. There is insufficient antecedent basis for these limitations in

the claim.

                              Claim Rejections - 35 USC § 102

        The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

7.   **Claim 1, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by**

US 6961857 (Floryanzia).

        As to claim 1, Floryanzia discloses an authentication method for network security,

comprising the following steps: step 1: a Media Gateway Controller (MGC) configuring a Media

Gateway (MG) with an authentication key, and setting a security data package on a network

protocol (Floryanzia Abstract, lines 2-4: in a Registration Security approach, a Gatekeeper sends

an Access Token in all Registration Request messages. The Access Token contains information

that authenticates the Gateway (MG) to the Gatekeeper (MGC) and column 2, lines 30-31: Each

Gatekeeper is also a controller and has some of the same responsibilities as the Media Gateway

Controller 112...);

step 2: the MGC, during the security authentication, sending security authentication

request data to the MG using the data package (Floryanzia column 4, lines 23-31:

...authentication request information comprises the steps of receiving an access token

comprising a general identifier value, a time stamp value, a challenge value, and a random value.

In a related feature, the step of receiving non-encrypted authentication request information

comprises the steps of receiving an H.235 ClearToken comprising a general identifier value, a

time stamp value, a challenge value, and a random value...);

the MG performing an encryption calculation on the request data using the

authentication key, and responding to MGC with the encrypted request (Floryanzia column 7,

lines 1-10 and column 8, lines 35-45: ...While both CHAP and H.235 use MD5 hashing to

provide security, according to an embodiment, a mapping between the CHAP and H.235

messages allows CHAP to use H.235 token data for authentication. In this embodiment, the

cryptoToken fields are mapped to fields of Access Token 204, which acts as an H.235

ClearToken for transport purposes. In this configuration, Access Token 204 carries all

information needed to carry out a CHAP protocol Challenge and to enable a node that receives

such a Challenge to create and evaluate a response....and A Gateway may generate the MD5

message digest using the following values where "+" denotes concatenation:

Challenge=[Random value+Gateway User Password+Time Stamp value]MD5 Hash

An authentication server that uses CHAP performs the following calculation to determine what

the challenge should be: CHAP Response=[CHAP ID+User Password+CHAP Challenge]MD5

Hash);

       step 3: the MGC determining whether the MG being authenticated is legal according to

the authentication result (Floryanzia column 8, lines 57-67: With a Gatekeeper that uses

Registration Security, the Gateway includes an Access Token in all Registration Request (RRQ)

messages. In such a case, the Access Token contains information that authenticates the Gateway

to the Gatekeeper. The Gatekeeper formats a message to a RADIUS server that will authenticate

the information contained in the token. It will respond back to the Gatekeeper with either an

Access-Accept or Access-Reject message. In turn, the Gatekeeper responds to the Gateway with

either a Registration Confirm (RCF) message or a Registration Reject (RRJ) message).

       As to claim 4, Floryanzia discloses the authentication method for network security

according to claim 1, wherein said data package comprises a security authentication request

signal and a security authentication completion event, said security authentication request signal

comprising a security authentication parameter, and said security authentication completion

event comprising a security authentication result parameter (Floryanzia column 8, lines 5-34:

TABLE 1 ACCESS TOKEN VALUES / / / / / / / / / ACCESS TOKEN RADIUS VALUE

ATTRIBUTE (#) DESCRIPTION General Identifier User-Name (1) The Gateway H.323-ID

value or a user account number Time Stamp CHAP-Challenge (60) The current time of the

Gateway; used as an implied CHAP-challenge as if it initially came from the Gatekeeper.

Challenge CHAP-Password: A 16-byte MD5 message Chap Response (3) digest that is generated

by the Gateway. Random CHAP-Password: A one-byte value that is CHAP Identifier (3) used by

an authentication server to identify a particular request. The Gateway increments a variable

modulo 256 for each authentication request to provide the value. tokenOID (object Not used

Identifies all tokens of this identifier) type. / / / / / / / / /).

     As to claim 5, Floryanzia discloses the authentication method for network security

according to claim 4, wherein said step 2 further comprises: step 21: the MGC sending the

security authentication request signal in the data package to the MG; step 22: the MG, after

receiving the security authentication parameter in the security authentication request signal,

performing encryption calculation on said parameter using the authentication key, and reporting

the encryption calculated result to the MGC through the security authentication result parameter

in the security authentication completion event in the data package (Floryanzia Figures 3A, 3B,

3C, column 9, lines 34-43, and column 10, lines 1-43: FIG. 3A is a diagram of messages that

may pass between elements of the system of FIG. 2A in a secure Registration message flow.

Such a message flow can be used for all exchanges between gateways and gatekeepers.

(25) In block 302, a Gateway generates an Access Token using its Gateway password and the

Gateway alias, which is a unique identifier of the Gateway under H.323. In block 304, the

Gateway creates a Registration Request (RRQ) message to send to the Gatekeeper that includes

the Access Token. In block 306, the RRQ message is sent to the Gatekeeper).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

8.   **Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over**

US 6961857 (Floryanzia) in view of US 20020120760 (Kimchi).

        As to claim 2, Floryanzia teaches the authentication method for network security

according to claim 1. Floryanzia fails to teach wherein said network protocol is Media Gateway

Control Protocol (MGCP).

        However, Kimchi discloses wherein said network protocol is Media Gateway Control

Protocol (MGCP) (Kimchi paragraph 0036, lines 1-17: The Media Gateway Control Protocol,

developed by Telcordia and Level 3 Communications, is one of a few proposed control and

signal standards to compete with the older H.323 standard for the conversion of audio signals

carried on telephone circuits (PSTN) to data packets carried over the Internet or other packet

networks. The reason new standards are being developed is because of the growing popularity of

Voice over IP (VoIP). MGCP and Megaco/H.248 are media gateway control protocols defined

by the IETF and ITU-T for use in distributed switching environments. Referring to FIG. 3c,

signaling logic is located on Media Gateway Controllers 330 (MGCs-also known as Call Agents

or SoftSwitches) and media logic is located on Media Gateways 332 (MGs). Using MGCP or

Megaco/H.248 334, MGCs can control MGs to set up media (for example, voice traffic) paths

336 through the distributed network).

It would be obvious to one of ordinary skill in the art at the time of the applicant's

invention that the MGCP is one of the proposed upgrades for the older H. 323 standard (Kimchi

paragraph 0036, lines 1-17: The Media Gateway Control Protocol, developed by Telcordia and

Level 3 Communications, is one of a few proposed control and signal standards to compete with

the older H.323 standard for the conversion of audio signals carried on telephone circuits (PSTN

) to data packets carried over the Internet or other packet networks. The reason new standards are

being developed is because of the growing popularity of Voice over IP (VoIP). MGCP and

Megaco/H.248 are media gateway control protocols defined by the IETF and ITU-T for use in

distributed switching environments. Referring to FIG. 3c, signaling logic is located on Media

Gateway Controllers 330 (MGCs-also known as Call Agents or SoftSwitches) and media logic is

located on Media Gateways 332 (MGs). Using MGCP or Megaco/H.248 334, MGCs can control

MGs to set up media (for example, voice traffic) paths 336 through the distributed network).

As to claim 3, Floryanzia teaches the authentication method for network security

according to claim 1. Floryanzia fails to teach wherein said network protocol is H248 protocol.

However, Kimchi discloses wherein said network protocol is H248 protocol (Kimchi

paragraph 0036, lines 1-17: The Media Gateway Control Protocol, developed by Telcordia and

Level 3 Communications, is one of a few proposed control and signal standards to compete with

the older H.323 standard for the conversion of audio signals carried on telephone circuits (PSTN)

to data packets carried over the Internet or other packet networks. The reason new standards are being developed is because of the growing popularity of Voice over IP (VoIP). MGCP and Megaco/H.248 are media gateway control protocols defined by the IETF and ITU-T for use in distributed switching environments. Referring to FIG. 3c, signaling logic is located on Media Gateway Controllers 330 (MGCs-also known as Call Agents or SoftSwitches) and media logic is located on Media Gateways 332 (MGs). Using MGCP or Megaco/H.248 334, MGCs can control MGs to set up media (for example, voice traffic) paths 336 through the distributed network).

It would be obvious to one of ordinary skill in the art at the time of the applicant's invention that the H248 is another proposed upgrade for the older H. 323 standard (Kimchi paragraph 0036, lines 1-17: The Media Gateway Control Protocol, developed by Telcordia and Level 3 Communications, is one of a few proposed control and signal standards to compete with the older H.323 standard for the conversion of audio signals carried on telephone circuits (PSTN) to data packets carried over the Internet or other packet networks. The reason new standards are being developed is because of the growing popularity of Voice over IP (VoIP). MGCP and Megaco/H.248 are media gateway control protocols defined by the IETF and ITU-T for use in distributed switching environments. Referring to FIG. 3c, signaling logic is located on Media Gateway Controllers 330 (MGCs-also known as Call Agents or SoftSwitches) and media logic is located on Media Gateways 332 (MGs). Using MGCP or Megaco/H.248 334, MGCs can control MGs to set up media (for example, voice traffic) paths 336 through the distributed network).

Prior Art

9.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. US 7305550 (Applicant's Admitted Prior Art) is pertinent because it teaches method

for providing authentication and verification services in an enhanced media gateway. US

20040024902 is pertinent because it teaches Megaco is a device control protocol defining a

general framework for physically decomposed media gateway, where the intelligence of the

gateway is in a master node called the media gateway controller and the actual switching and

media transfer is performed in one or more slave nodes called the media gateway(s).

Conclusion

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to REBECCA L. PACHURA whose telephone number is (571)270-

3402. The examiner can normally be reached on Monday-Thursday 7:30 am-6:00 pm est.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ramesh Patel can be reached on (571) 272-3688. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. L. P./

/Rebecca L Pachura/

Examiner, Art Unit 4171

/Ramesh B. Patel/

Supervisory Patent Examiner, Art Unit 4171